Homework 0

Main objective

The goal of this assignment is to encourage you to study various natural language processing (NLP) topics independently. For this homework, you will need to prepare a 5-7 minute presentation describing one of the following:

- An NLP algorithm of your choice. This can be any algorithm you would like to learn more about including the ones we already discussed or will discuss in class. Example: Topic models (https://en.wikipedia.org/wiki/Topic_model).
- An NLP dataset. For inspiration look at the datasets posted here: https://github.com/niderhoff/nlp-datasets
- An NLP task. For inspiration look at the SemEval tasks:
  - http://alt.qcri.org/semeval2017/index.php?id=tasks
  - http://alt.qcri.org/semeval2018/index.php?id=tasks
  - https://en.wikipedia.org/wiki/Natural_language_processing#Major_evaluations_and_tasks
- An area of NLP we will probably not cover in class. Please include the basic problem formulation and a high-level overview of existing solutions. Example: machine translation.
- An NLP paper of your choice published in a major conference. Most major NLP conferences archive their proceedings here: http://www.aclweb.org/anthology/.
- An interesting application of NLP.
- Open-source NLP software. Example: https://opensource.com/business/15/7/five-open-source-nlp-tools
- A newsworthy item related to NLP.
- Anything else related to NLP.

At the end of your presentation we will allocate a few minutes for questions and discussion.

Logistics

Please add your name to the presentation signup signup sheet as soon as possible: Signup Sheet ('signup sheet' is clickable). We will have at most two presenters per class. Signing up early will give you more options.

What to submit: After you are done with your presentation in class, please upload your slides to Sakai.

Resources

For inspiration, feel free to study the following resources:

- https://medium.com/tag/nlp
- https://medium.com/tag/naturallanguageprocessing
- https://www.reddit.com/r/LanguageTechnology/
- https://arxiv.org/list/cs.CL/recent
- http://newsletter.ruder.io
- https://techcrunch.com/tag/nlp/
- https://techcrunch.com/tag/natural-language-processing/
- https://www.google.com

If you find any other interesting resources, please feel free to post them on Slack!

Good luck!